

PHILIP MORRIS U. S. A.

I N T E R - O F F I C E C O R R E S P O N D E N C E

Richmond, Virginia

To: . Mr. J. E. Wickham Date: February 9, 1987

From: . Barbara S. Mait

Subject: . Comparison of Tar, Nicotine and Carbon Monoxide Deliveries  
For Market Sample #29: TITL versus Philip Morris

The tar, nicotine and carbon monoxide (CO) deliveries of 256 domestic cigarette brands were reported by the Tobacco Institute Testing Laboratory (TITL) in December, 1986. The TITL data, based on Market Sample #29, were compared with Philip Morris data from the March, 1986 Cigarette Information Report. Samples tested by TITL were purchased in 50 geographic locations throughout the U.S. in February and March, 1986.

The average tar, nicotine and CO deliveries of all brands included in the comparative study are listed.

	Tar, <u>mg/cigt.</u>	Nicotine, <u>mg/cigt.</u>	CO, <u>mg/cigt.</u>
TITL	12.1	0.85	12.3
Philip Morris	11.6	0.86	11.4

A significant increase was observed in the tar and CO deliveries reported by TITL for Market Sample #29 as compared to the previous Market Sample (#28) and comparable Philip Morris data. No significant difference in the nicotine delivery between the laboratories was noted. The average tar, nicotine and CO deliveries for Market Sample #29 in comparison to previous surveys are given in Table I.

The increase in the tar and CO deliveries of TITL can be attributed to a higher overall puff count (0.3) for this Market Sample. The increase in puff count has a greater impact on the tar and CO deliveries of brands in the 10 to 20 mg range than on brands in the 0 to 10 mg range. Since over 55% of the brands tested in this survey were in the 10 to 20 mg range, the increase in puff count will result in higher deliveries of these brands, and thus the overall increase in tar and CO averages for TITL.

The average differences in the tar and nicotine deliveries by increment tar ranges are given in Table II. The average differences in CO delivery between the two laboratories are given in Table III. The correlations of the tar, nicotine and CO deliveries of TITL and Philip Morris are shown in Graphs 1,2 and 3, respectively.

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The individual brand comparisons by manufacturer for tar, nicotine and CO deliveries are reported in Tables IV-X. Large differences observed between laboratories, other than those resulting from puff count, may be attributed to different sampling methods, the ability of Philip Morris to detect brand modifications, and the new location of the TITL laboratory.

It has been determined that the accepted FTC testing methodology does not accurately measure the deliveries of Kool Ultra cigarettes; therefore, these brands were omitted from the comparative studies. Additions and deletions of brands since the publication of Market Sample #28 are listed in Table XI.

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Attachments